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International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : H04B 15/00, 1/10, H04K 1/00, H04L 27/30, 7/00	A1	(11) International Publication Number: WO 00/04657 (43) International Publication Date: 27 January 2000 (27.01.00)
(21) International Application Number: PCT/US99/14146 (22) International Filing Date: 14 July 1999 (14.07.99) (30) Priority Data: 60/092,839 14 July 1998 (14.07.98) US (71) Applicant (for all designated States except US): SANCONIX, INC. [US/US]; 101 West Robert E. Lee Boulevard, New Orleans, LA 70124 (US). (72) Inventor; and (75) Inventor/Applicant (for US only): ROUQUETTE, Robert, E. [US/US]; 633 Meursault Drive, Kenner, LA 70065 (US). (74) Agents: KUESTERS, Eckhard, H. et al.; Oblon, Spivak, McClelland, Maier & Neustadt, P.C., Crystal Square Five, 4th floor, 1755 Jefferson Davis Highway, Arlington, VA 22202 (US).		(81) Designated States: AU, CA, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i>
(54) Title: NARROW-BAND INTERFERENCE REJECTING SPREAD SPECTRUM RADIO SYSTEM AND METHOD		
(57) Abstract A spread spectrum receiver and method having narrow-band interference rejection of narrow-band jamming signals using digital signal processing frequency domain techniques. The method performed in the receiver includes transforming the received signal to a frequency domain signal and identifying narrow-band interference components in the frequency domain signal; suppressing the identified narrow-band interference components by excising the identified narrow-band interference components from the frequency domain signal to produce an interference excised signal in the frequency domain, and storing in a memory frequencies corresponding to the identified narrow-band interference components; synchronizing a receiver code to a transmitter code in the frequency domain using the interference excised signal; generating coefficients for a time domain filter that includes notches at the frequencies corresponding to the excised narrow-band interference components and that jointly despreads and rejects narrow-band interference from the excised frequencies; applying the coefficients generated in the preceding step to the time domain filter; and despreads and filtering in real time in the time domain the received signal using the applied coefficients.		